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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,059	04/13/2001	Mark Gray	55218-0507	5951

29989 7590 12/21/2005

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EXAMINER

REFAI, RAMSEY

ART UNIT PAPER NUMBER

2152

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# **Interview Summary**

Application No.

09/835,059

Applicant(s)

GRAY, MARK

Examiner

Ramsey Refai

Art Unit

2152

All participants (applicant, applicant's representative, PTO personnel):

(1) Ramsey Refai.

(3) \_\_\_\_\_.

(2) Craig G. Holmes.

(4) \_\_\_\_\_.

Date of Interview: \_\_\_\_\_.

Type: a) ☒ Telephonic b) ☐ Video Conference

c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.

If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: 1 and 6.

Identification of prior art discussed: Schenkel et al (U.S. Patent No. 6,728,670).

Agreement with respect to the claims f) ☐ was reached. g) ☒ was not reached. h) ☐ N/A.

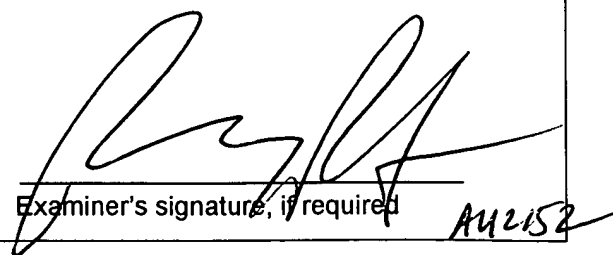
Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Examiner's signature, if required

 AU2152

## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

#### Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent and Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Applicant's representative Mr. Craig Holmes faxed a lengthy agenda prior to the interview. Mr. Holmes discussed the differences between the Applicant's claimed invention and the Schenkel et al reference. Not all points on the agenda were discussed. Examiner understands Mr. Holmes point of view, but still feels that the Schenkel et al reference in its entire may still teach the claimed invention. Examiner suggest that Mr. Holmes file an amendment that includes all the arguments presented during the interview and the Examiner will fully consider all points .

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SAN JOSE, CALIFORNIA 95110-1089  
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## FACSIMILE TRANSMITTAL SHEET

TO:	FROM:
Examiner	Craig G. Holmes
COMPANY:	DATE:
U.S.P.T.O.	DECEMBER 5, 2005
FAX NUMBER:	TOTAL NO. OF PAGES INCLUDING COVER:
(571) 273-3975	5
PHONE NUMBER:	SENDER'S REFERENCE NUMBER:
571-272-3975	55218-0507
RE:	YOUR REFERENCE NUMBER:
Interview Request Form	09/835,059

☐ URGENT ☒ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

## NOTES/COMMENTS:

Please see attached Applicant Initiated Interview Request Form for the interview date/time of Tuesday, December 13, 2005, 4:00 PM EST (1:00 PM PST) as we discussed yesterday on the phone.

The following is the proposed agenda. Descriptions of the arguments for each item are included on the pages following the Applicant Initiated Interview Request Form.

- 1) The Office Action's Application of Schenkel to Claim 1 is Unclear
- 2) Schenkel's "idle" device is not an "unpowered" device
- 3) Features of Additional Claims

Thank you.

Craig Holmes  
(408) 414-1207

THE INFORMATION CONTAINED IN THIS FACSIMILE IS INTENDED ONLY FOR THE PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENT(S) NAMED ABOVE. THIS MESSAGE MAY BE AN ATTORNEY-CLIENT COMMUNICATION, AND AS SUCH IS PRIVILEGED AND CONFIDENTIAL. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT OR AN AGENT RESPONSIBLE FOR DELIVERING IT TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT YOU HAVE RECEIVED THIS DOCUMENT IN ERROR AND THAT ANY REVIEW, DISSEMINATION, DISTRIBUTION OR COPYING OF THIS MESSAGE IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE AND RETURN THE ORIGINAL MESSAGE TO US BY MAIL. THANK YOU.

PTOL-413A (09-04)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

## Applicant Initiated Interview Request Form

Application No.: 09/835,059 First Named Applicant: Mark Gray  
 Examiner: Ramsey Redai Art Unit: 2152 Status of Application: 1st OA after RCE

## Tentative Participants:

(1) Ex. Redai (2) App's Rep/Att: Craig G. Holmes  
 (3) \_\_\_\_\_ (4) \_\_\_\_\_

Proposed Date of Interview: Tuesday, Dec. 13th, 2005 Proposed Time: 4:00 (AMT) EST  
(1:00 PM PST)

## Type of Interview Requested:

(1) ☒ Telephonic (2) ☐ Personal (3) ☐ Video Conference

Exhibit To Be Shown or Demonstrated: ☐ YES

☒ NO

If yes, provide brief description: \_\_\_\_\_

## Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) <u>Rej. 102(a)</u>	<u>1, 12, 6</u>	<u>Schenkel, Knecht</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(2) <u>Rej. 103(a)</u>	<u>16</u>	<u>Schenkel, Knecht, Chang</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(3) <u>Rej. 103(a)</u>	<u>3, 12</u>	<u>Schenkel, Knecht, Singh</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(4) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Continuation Sheet Attached					

## Brief Description of Arguments to be Presented:

Please see attached sheets.

An interview was conducted on the above-identified application on \_\_\_\_\_.

**NOTE:** This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).

This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

Craig G. Holmes 12/5/05  
 Applicant/Applicant's Representative Signature

Examiner/SPE Signature

Craig G. Holmes  
 Typed/Printed Name of Applicant or Representative

44,770  
 Registration Number, if applicable

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Applicant Initiated Interview Request Form

55218-0507

Application No.: 09/835,059

**Brief Description of Arguments to be Presented:****Agenda Item 1: The Office Action's Application of Schenkel to Claim 1 is Unclear**

The Office Action rejects Claim 1 over Schenkel, citing Col. 2, lines 20-40, Figure 2, and Col. 3, lines 18-32, explaining that these show "a signal sent from a source device to a destination device." The Response to Arguments portion of the Office Action states that "Schenkel teaches the stimulation of idle devices by using signal bursts in a network to allow discovery of network topology. Signal bursts are sent to a device until no longer idle, which is a change of the power state. These signal bursts are used to supply power to the unpowered or idled device. Signal bursts can then be sent across this device to other devices." (Citing Col. 19, lines 32-62, Col. 22, line 49 – Col. 23, line 28; and Col. 25, line 60 – Col. 6, line 19.)

The Applicant is unclear about which portions of Schenkel are being relied upon as showing the following features of Claim 1: (a) "the first network device", (b) "the second network device", (c) "the power state of the first network device," (d) "the alteration occurs at the second network device." The Applicant's attempts at matching the devices of Schenkel to those in the claims result in inconsistencies with other features of Claim 1.

First, from the Office Action, it initially appears that the Office Action is equating the "destination device" and "source device" of Schenkel to the "first network device" and "second network device," respectively (e.g., items (a) and (b) above), of Claim 1 because the Office Action says that the "signal bursts are sent to the destination device until no longer idle, which is a change of the power state." Assuming for the moment that sending the signal bursts is a change of power state, this matching of Schenkel's devices to those of Claim 1 is consistent with feature (c) above because the first network device (e.g., the destination device) has its power state being changed. However, this is inconsistent with feature (d) above of "identifying whether an alteration occurs at the second network device" because that would mean an alteration occurs at the source device in Schenkel that sends the signal bursts. But in Schenkel's approach, the link between the source device and destination device is determined by a statistical comparison of the traffic at the destination device and the source device, and thus any change that occurs, if at all, is at the destination device, not the source device (e.g., the first device), as in Claim 1.

Second, if the source and destination device are reversed such that the "first network device" of Claim 1 is the "source device" of Schenkel and the "second network device" of Claim 1 is the "destination device" in Schenkel, then the alteration (e.g., change in power state) occurs at destination device. Thus, the change in power state at the destination device in Schenkel corresponds to a change in power state of the second network device. But in Claim 1, the change in power state is of the first network device, not the second network device.

Thus, regardless of how the source and destination devices of Schenkel are matched against the first and second network devices of Claim 1, Schenkel always has both the change in power state and alteration at the destination device, yet in Claim 1, the change in power state and the alteration occur at different network devices.

Finally, the link between the source and destination devices is only determined if the traffic is statistically the same, and if the traffic is not statistically the same, then there is no link between the source and destination devices. But when the traffic is the same, then there is no alteration at all in the traffic between the two devices in Schenkel. Only if the traffic is not statistically the same (e.g., there is a change or alteration) is there not a link determined between the source and destination devices. Yet Claim 1 expressly features that the logical connection is created and stored when the alteration occurs at the second device, which is the opposite of Schenkel.

Thus, the Applicant is confused as to what features of Schenkel are being relied upon as showing the four specific features of Claim 1 (e.g., items (a) through (d) above) and how any matching of the source and destination devices of Schenkel to the first and second network devices of Claim 1 can be interpreted as consistently showing the remaining features of Claim 1.

Applicant Initiated Interview Request Form  
Application No.: 09/835,059

55218-0507

**Brief Description of Arguments to be Presented (continued):**

**Agenda Item 2: Schenkel's "idle" device is not an "unpowered" device**

The Office Action rejects the above features of Claims 1, 6, 12, and 16 based on Schenkel (Col. 2, lines 20-40; Figure 2, and Col. 3, lines 18-32; Col. 19, lines 24-45), with the Office Action explaining that Schenkel "shows a signal sent from a source device to a destination device." For Claim 16, the Office Action also cites Chang as disclosing the "on" and "off" feature (Abstract). Finally, the Office Action explains in the "Response to Arguments" that "Schenkel teaches the stimulation of idle devices by using signal bursts in a network to allow discovery of network topology. Signal bursts are sent to a device until no longer idle, which is a change of the power state. These signal bursts are used to supply power to the unpowered or idled device. Signal bursts can then be sent across this device to other devices." (Citing Col. 19, lines 32-62, Col. 22, line 49 – Col. 23, line 28; and Col. 25, line 60 – Col. 6, line 19.)

The Applicant notes that the Office Action's "Response to Arguments" correctly recognizes that the devices in Schenkel are neither "off" nor "unpowered" when the Office Action refers to the "idle devices" and "until no longer idle." However, the Applicant has not been able to find any support in Schenkel or explanation in the Office Action for the assertions (a) that the idle devices in Schenkel are "unpowered" or (b) that the "signal bursts are used to supply power."

In fact, the Office Action's own citations to Schenkel explains that *an IDLE device is NOT an UNPOWERED device*. Specifically, Schenkel states:

Stimulation of idle devices in a network allow their connections to be identified directly. The present invention can determine that a device is *idle because the volume of traffic in or out of it is insignificant*. It can then instruct a signal burst to be sent to or across this device in order to generate *enough traffic* to accurately locate it in the network.. *Idleness* can be expressed as having *a mean level of traffic below some cutoff* to be chosen by the operator. A convenient value of this cutoff is 5 units of activity per sampling period as this provides the classic chi-squared formulation with sufficient data for its basic assumptions to be reasonable accurate. (Col. 19, lines 33-46; emphasis added.)

Therefore, Schenkel clearly defines *an idle device as a device for which the traffic is not zero, but merely insignificant*, meaning that the traffic through the device is below a cutoff value does not allow for accurate identification of the network connections. If in Schenkel the device were actually "unpowered," then the device in Schenkel would have zero traffic and would be unable to receive the signal bursts due to the lack of power.

The use of a signal burst to increase the traffic for an idle device so that the device can be located indicates that the device is already in a "powered" power state (e.g., the device is "on"). The sending of the signal burst does not change the power state from unpowered to powered or from off to on (or vice versa), nor does the sending of the signal burst provide power to the idle device. Rather, *the signal burst merely supplies sufficient traffic so that the statistical comparison of the traffic sent to the traffic received is meaningful*. Because the basis for Schenkel's connection identification approach is a statistical method, sufficient traffic must be used in order to make a statistically meaningful comparison between the traffic sent and the traffic received, and therefore conclude that the sending device and the receiving device are connected because the traffic sent is statistically the same as the traffic received.



Applicant Initiated Interview Request Form  
Application No.: 09/835,059

55218-0507

**Brief Description of Arguments to be Presented (continued):**

**Agenda Item 3: Features of Additional Claims**

**Claim 13** features the use of a "power controller that changes the power state of the first network device from unpowered to powered." The Office Action cites Singh as disclosing a power controller that "powers up connected computers and other peripheral devices," which the Applicant does not presently dispute. However, the Office Action continues to rely on the previously discussed portions of Schenkel above as disclosing all the features of Claim 12 from which Claim 13 depends.

In Schenkel's approach, the determination of connections between devices is based on a statistical comparison of the traffic of the signal bursts between source and destination devices, which is independent of a power controller changing the power state of the first network device from unpowered to powered as in Claim 13. Thus, it is not clear to the Applicant how the use of Singh's power controller can be incorporated into the approach of Schenkel without changing the principal of operation used by Schenkel to determine connections (e.g., the statistical comparison of network traffic).

**Claim 3** features "determining whether a state of a port of the terminal server is changed from dead to active in response to changing the power state of the first network device." As a preliminary matter, there appears to be a typographical omission in the citations for Claim 3 in the Office Action that begins by referring to "column 30 - 37" since it is unclear what column and line numbers are being referred to.

The Office Action cites Col. 2, line 65 - Col. 3, line 7, as disclosing a terminal server, yet the Applicant does not see a terminal server listed or described. The word "terminal" does not even appear in that passage, and the only occurrence of the word "server" is in referring to "file servers," which clearly are not terminal servers.

Next, while Col. 6, lines 30-35, lines 55-56, and Col. 27, lines 55-62, all refer to a "port," there is nothing in those cited portions or any other that the Applicant has found about the port being part of a terminal server. Furthermore, there is nothing in those cited portions of Schenkel about the state of the port changing from dead to active as in Claim 3, little less that such a change in state is in response to changing the power state of the first network device, as in Claim 1. While the last citation refers to "port level of activity," it is in the context of receiving a burst, which means non-zero activity, and thus does not disclose anything about the port being dead.

**Claim 16** features "power cycling a first network device from either "off" to "on" or from "on" to "off"." The Office action rejects the "power cycling" portion of this step on Schenkel and the off to on/on to off portion based on Chang. The Applicant does not presently dispute that Chang shows a remotely controlled power switch.

However, the Applicant fails to see how Chang can be incorporated into Schenkel's approach that is based on sending signal bursts and comparing network traffic between a source and destination device. If the device were turned from "on" to "off", then no signal bursts could be sent or received. If the device were turned from "off" to "on", then there is nothing about how that type of action would result in the signal bursts being sent as in Schenkel and the subsequent comparison of the network traffic to indicate whether a connection exists or not.